1. Driver's Blind View Spots

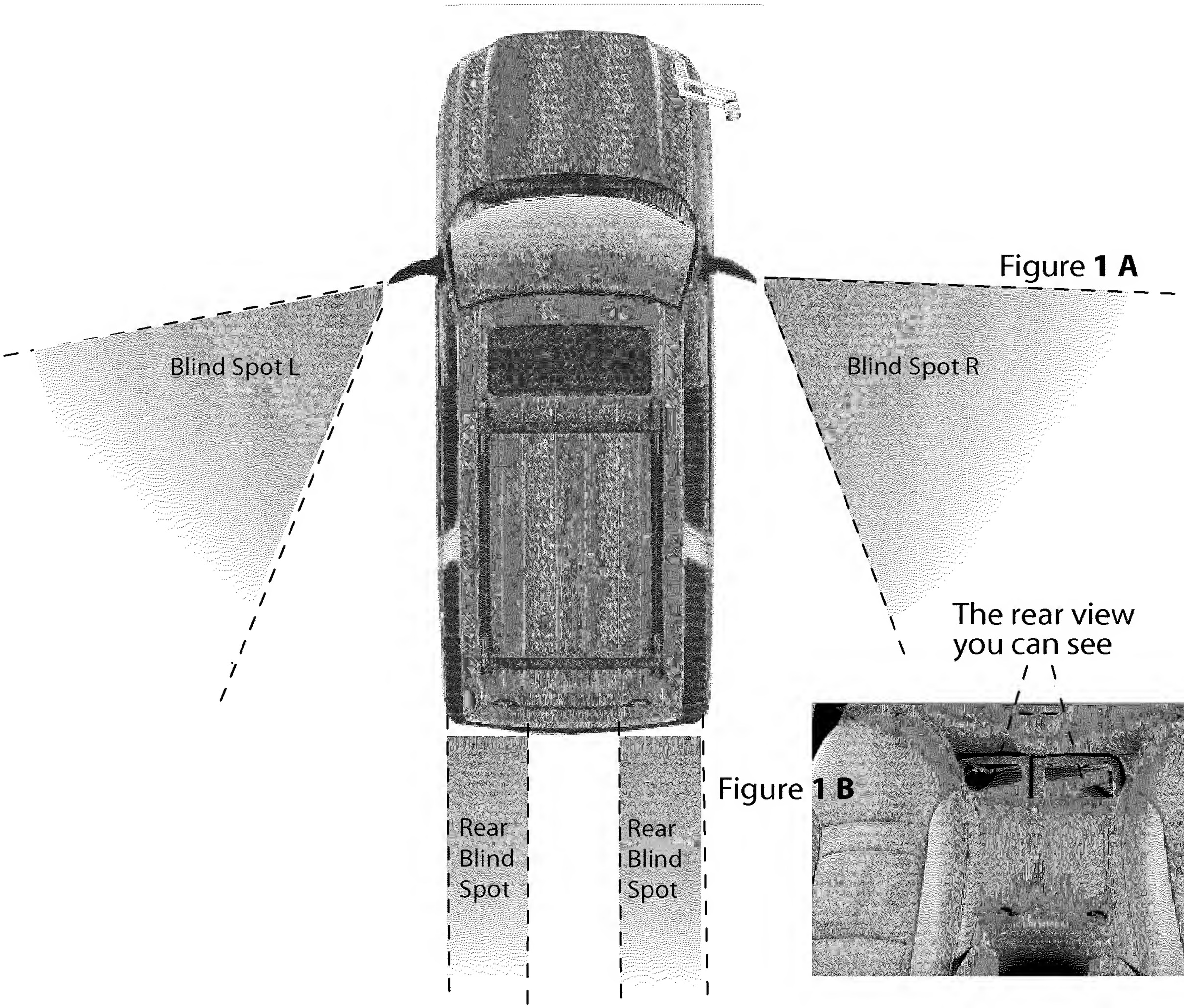


Figure **1 A**

The rear view you can see

Figure **1 B**

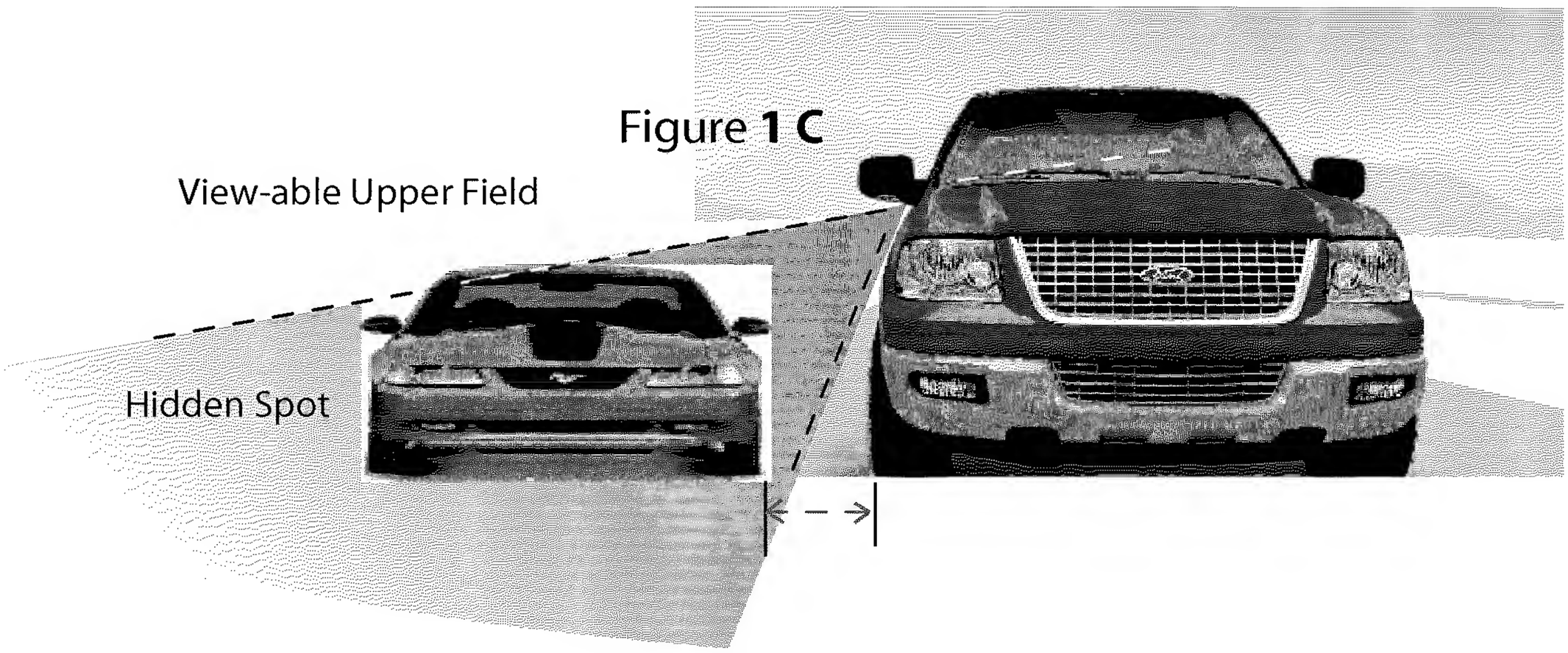


Figure **1 C**

2. Driver's Other Blind Spots & Problems of Single Rear View Camera

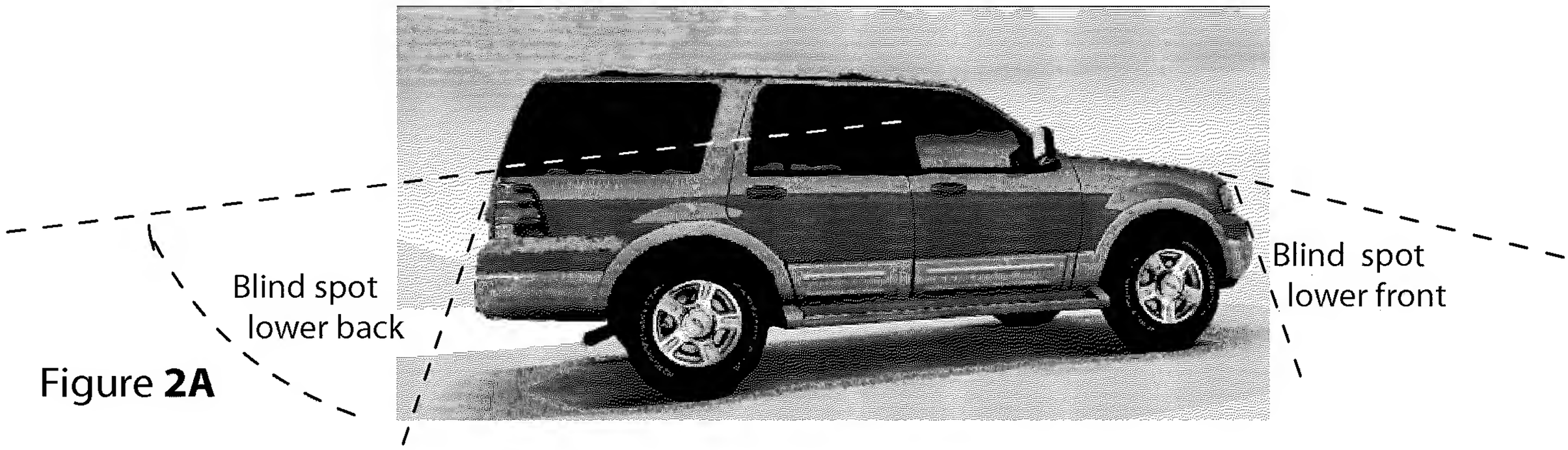
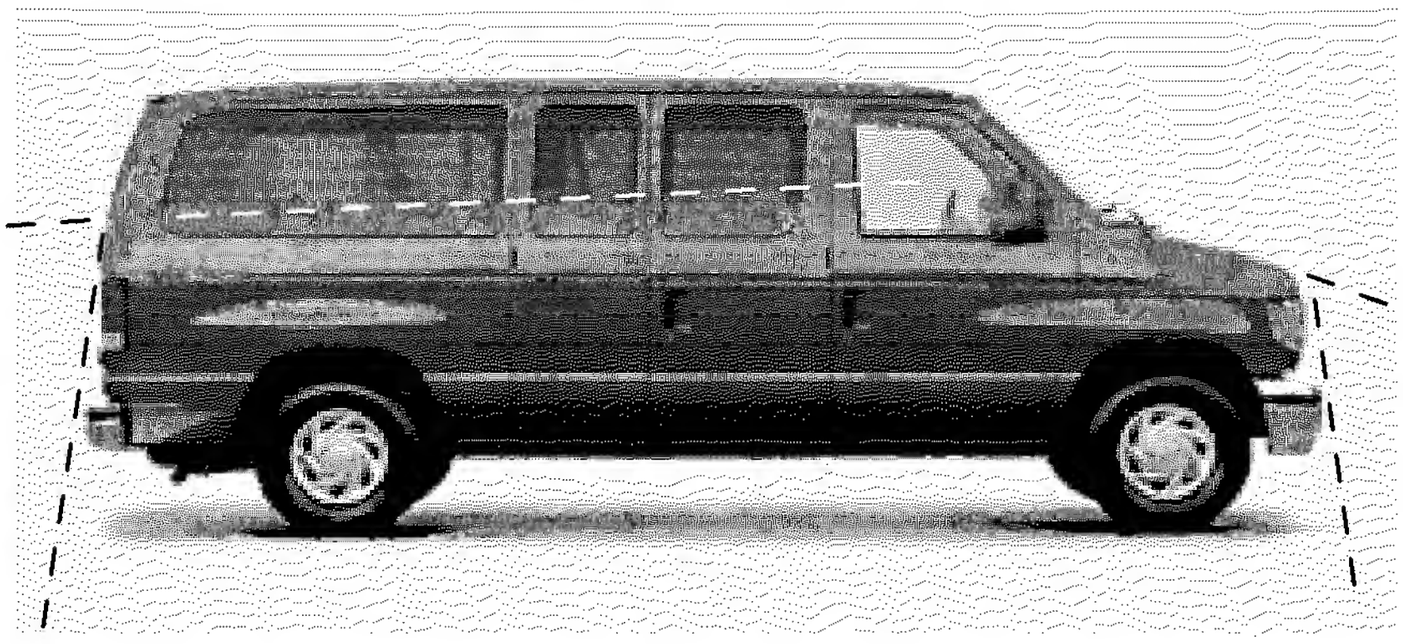


Figure **2A**



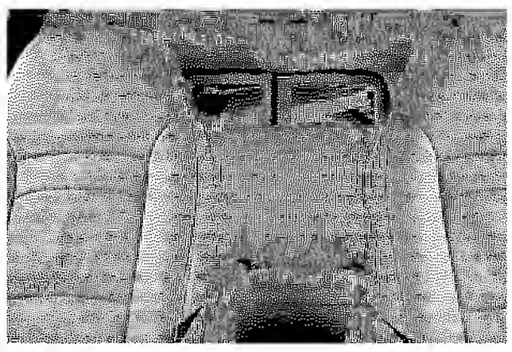
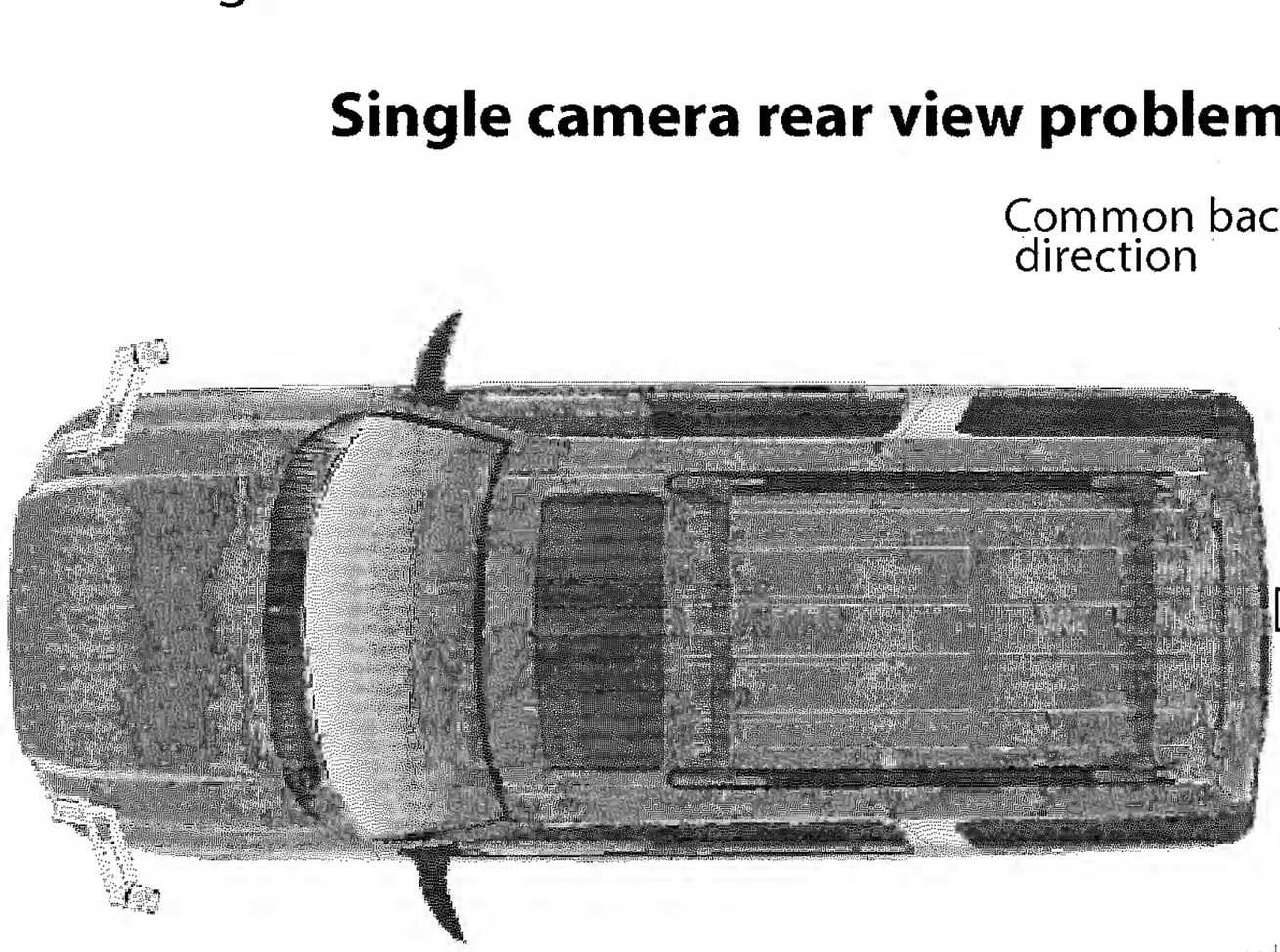
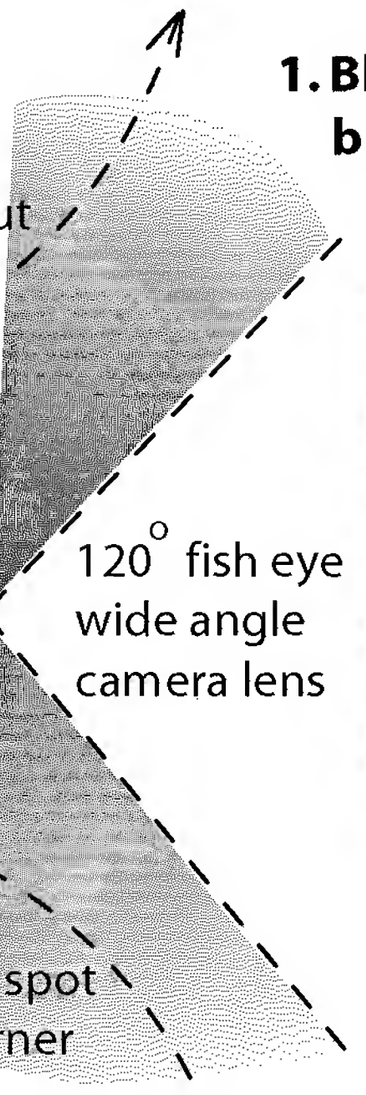


Figure **2B**

Figure **2C**

Single camera rear view problems





1. Blind spots at both side corners

Figure **2D**

2. Convex outward distortion

Can not tell how far is the rear vehicle away from you !

Using fish eye wide angle Len view, Image distortion is serious.
Video image of objects behind the vehicle is much smaller than image in side mirrors.
Can not measure the depth to object in behind.

3. Opto-Electronic CCD Cameras Eyes & Lens

Ultra Sensitive CCD, Super Night Vision Stars light View in Countryside
Day & Night High Dynamic Luminous Processing with DSP Chip
High Bright , High Optical Power & Low Distortion Lens

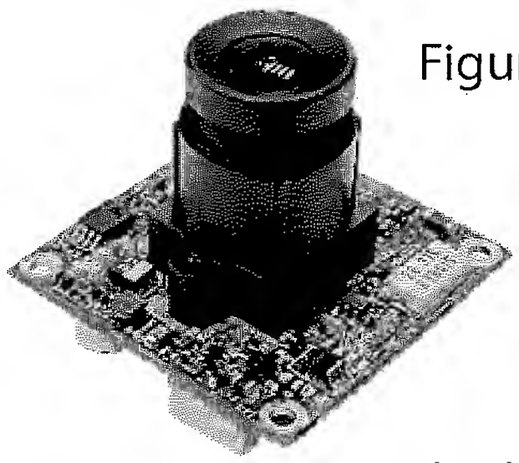
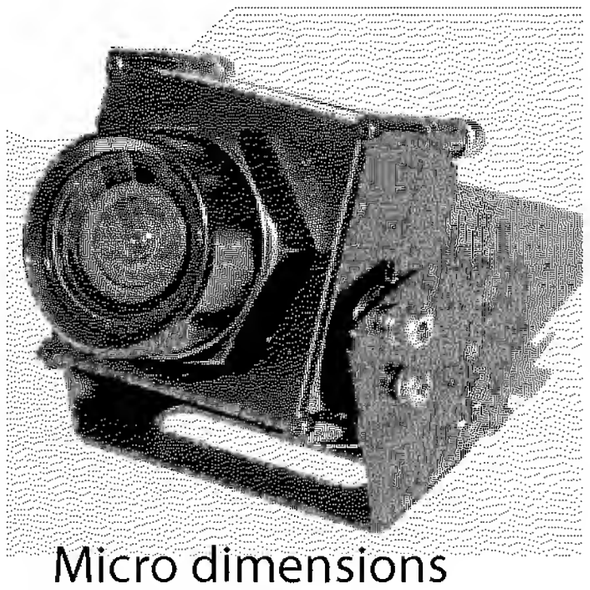


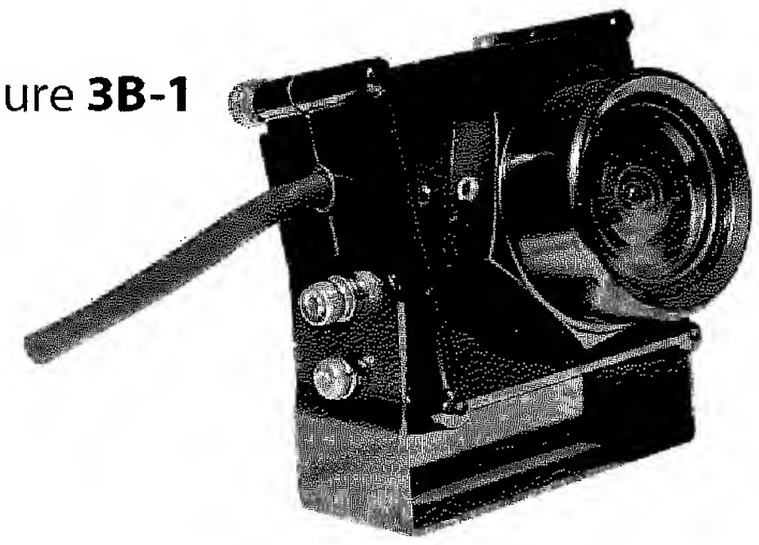
Figure **3A**

CCD camera PCB uses high tolerant
luminux circuit design &
the 6th generation DSP*chip



Micro dimensions
47 x 47 X 47 mm only

Figure **3B-1**



+ Water proof rust-free
aluminum enclosure

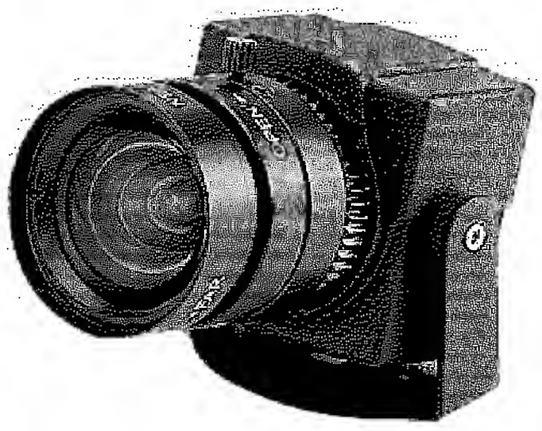


Figure **3B-2**

Auto Focus Lens 60°-15°degree
for central rear 200 feet view.
CS mount Len

DSP = Digital Signal Processor
CCD = Couple Charged Device

New Design to Improve Focal Lens Image Definition & Distortion

Semi spherical type wide angle typical focal Len
using in 1 camera type rear view

110-130°

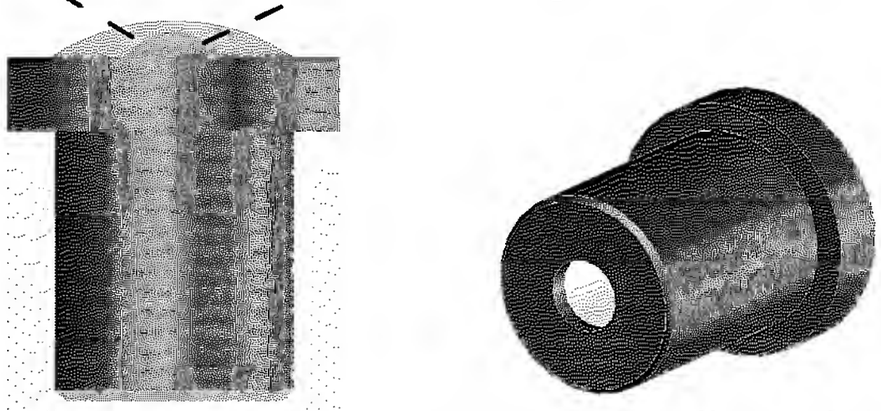


Figure **3C-1**

4.5 mm small Len hole
low image quality,
low brightness &
serious edge distortion

Lite arch 90° right angle Len
using dual camera for rear view

90°

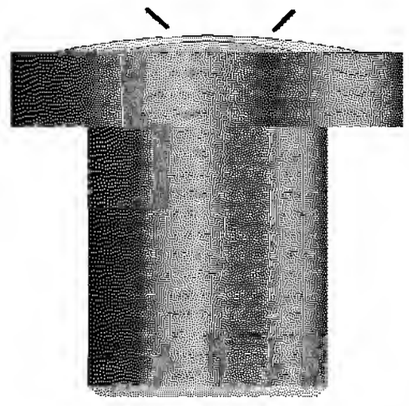
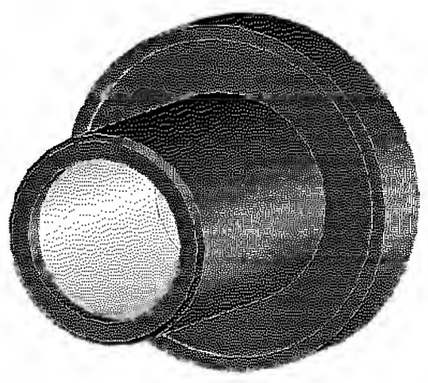


Figure **3C-2**



8.5 mm twice large Len hole,
high definition sharp image,
high sensitive & high bright,
High optical power, Low distortion

Typical focal Len serious edge distortion

Figure **3D**

Custom made focal Len is low distortion

4. On Dash Mount Dual LCD Screen e-Mirrors

Auto or Manual Switch to Side view / Rear view

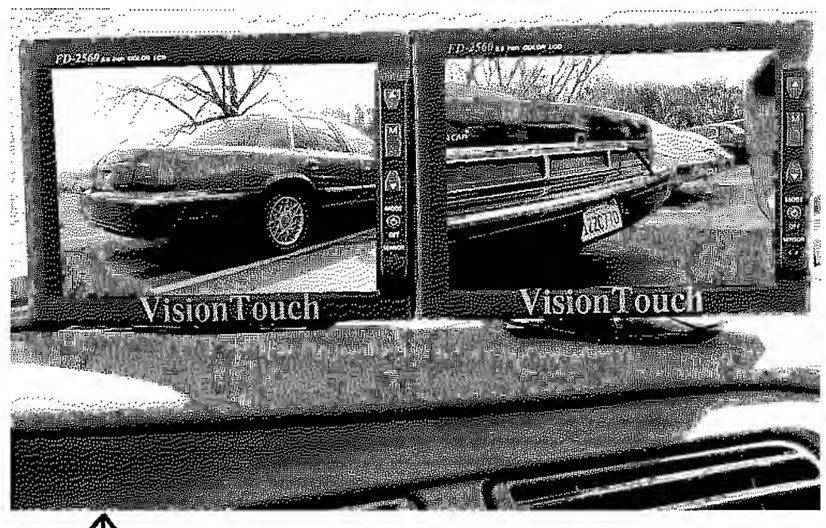
Figure **4A**

High Bright
5" to 5.6" LCD

Display at 320 X 234
resolution progressive video

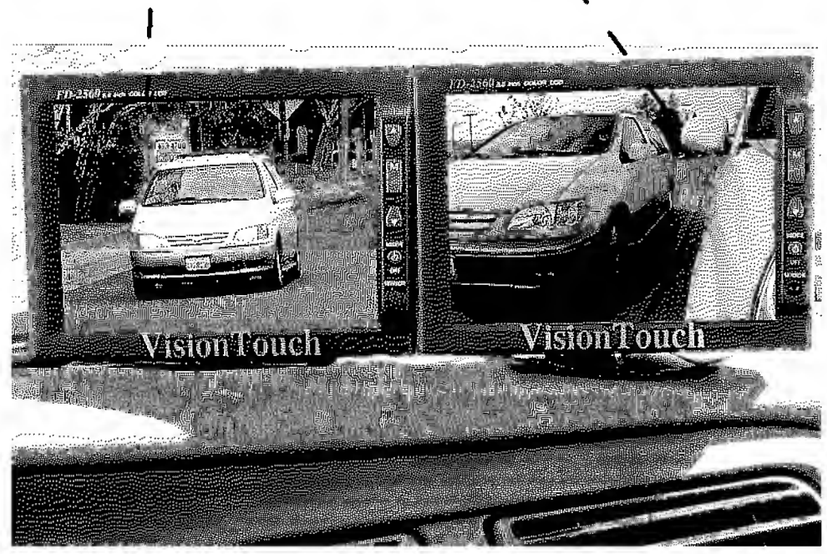
The Dual e-Mirrors for small vehicles

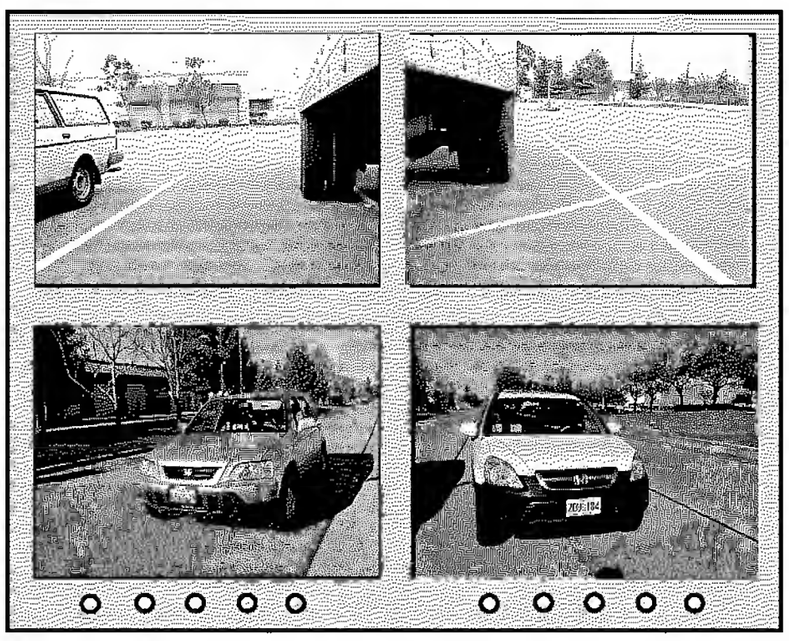
Rear View Mode



Switch-able to
Rear View Zoom in & **Side** *View Mode*

Figure **4B**

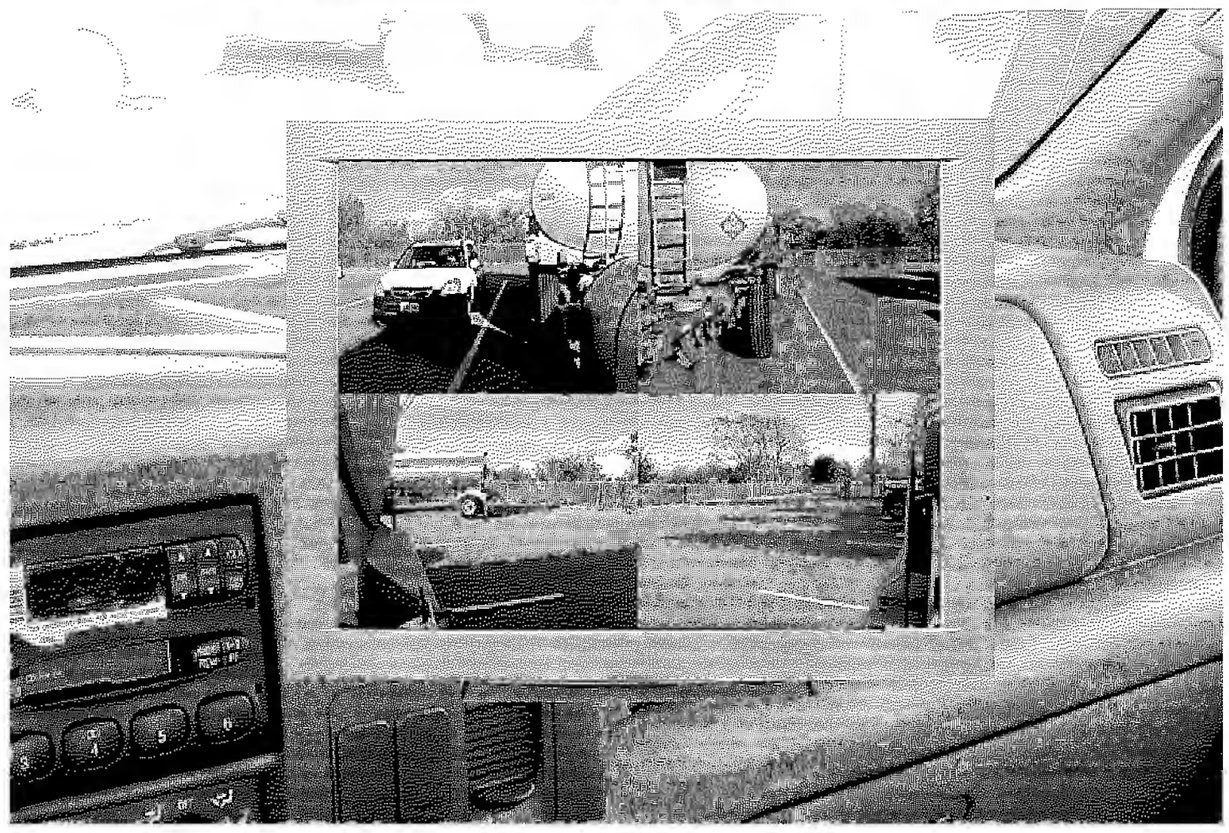




Quad Split
2 X 2 Screen
e-Mirrors

Figure **4C**

For Large Vehicles



5. License Plate L-R Stereo Mount Cameras Technique

A Uniform Mount For All Vehicle

Figure **5 A**

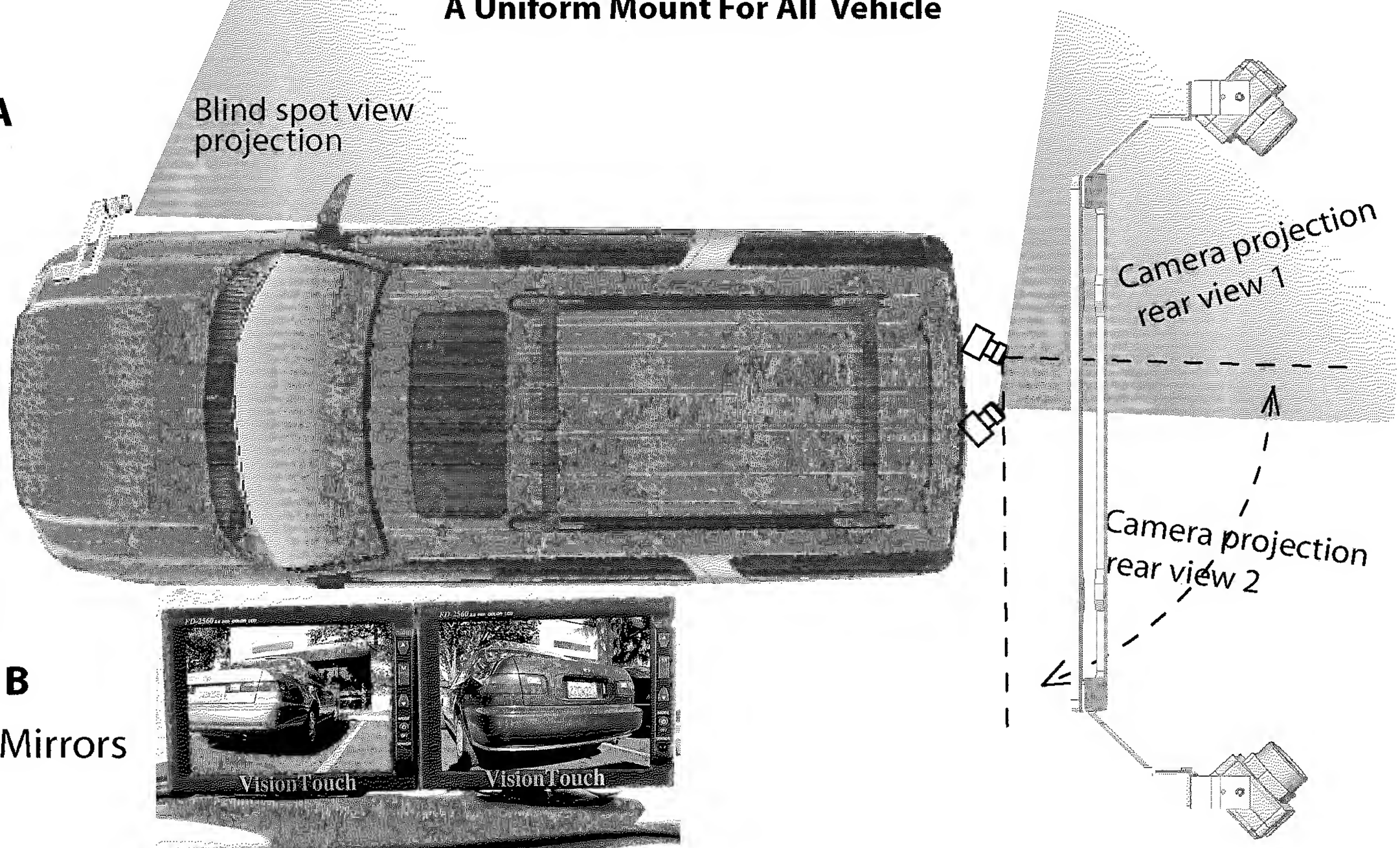


Figure **5 B**

The e-Mirrors

Using Dual Screens Monitor

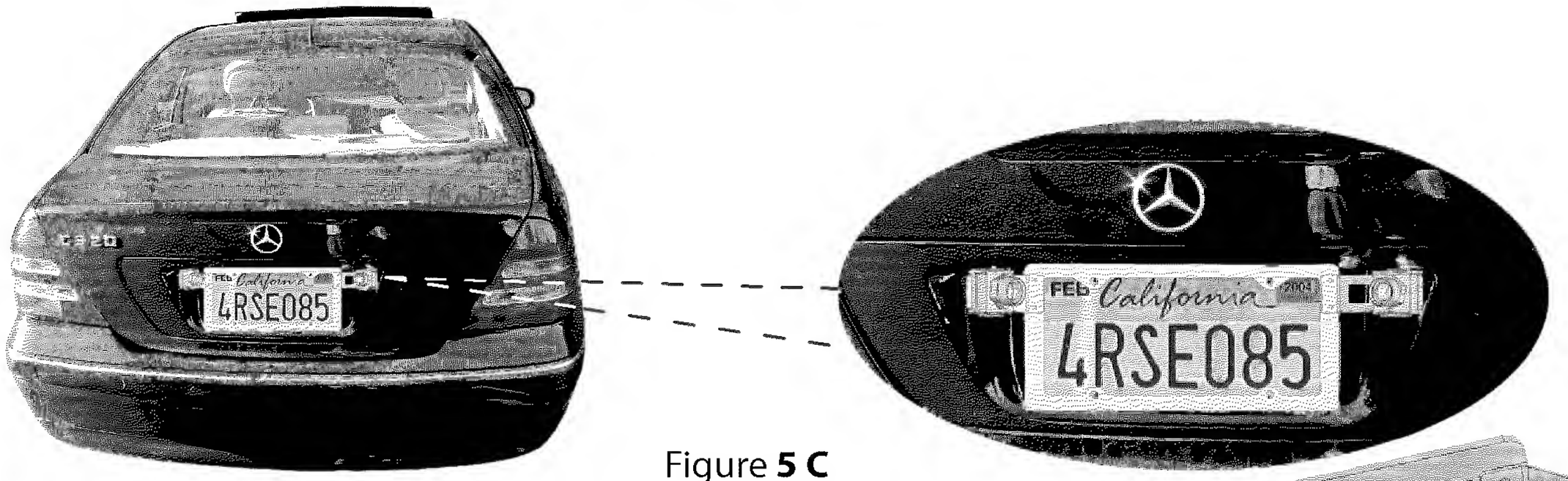
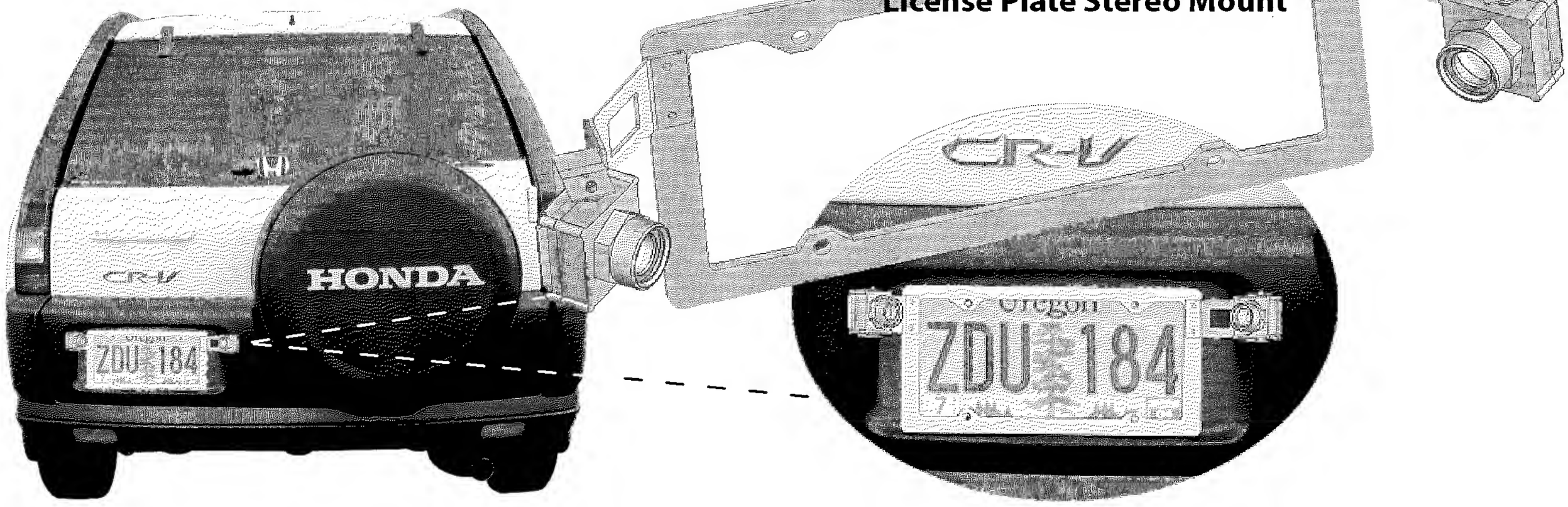


Figure **5 C**



6. Dual Cameras Rear Object Detection Technique

with Uniform License Plate On Frame Mount fit to all vehicles

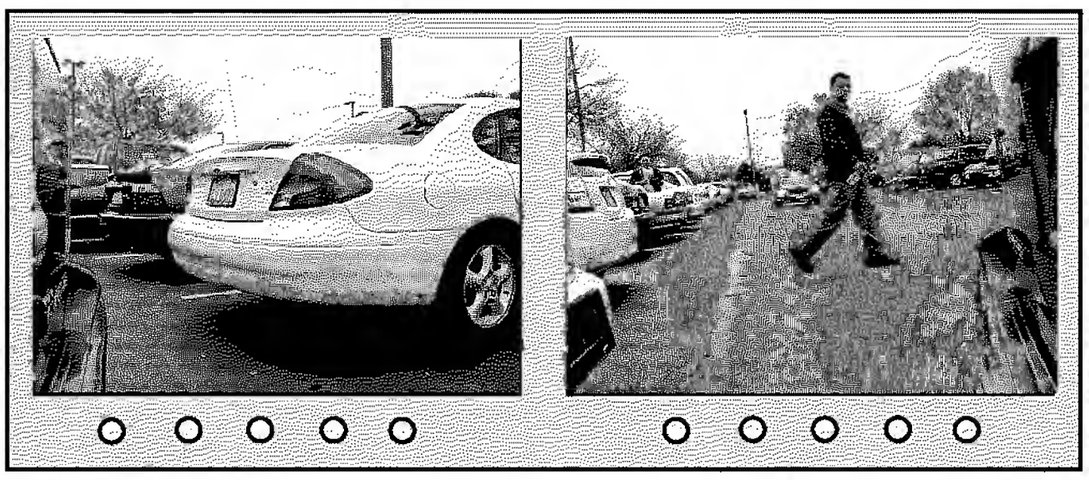
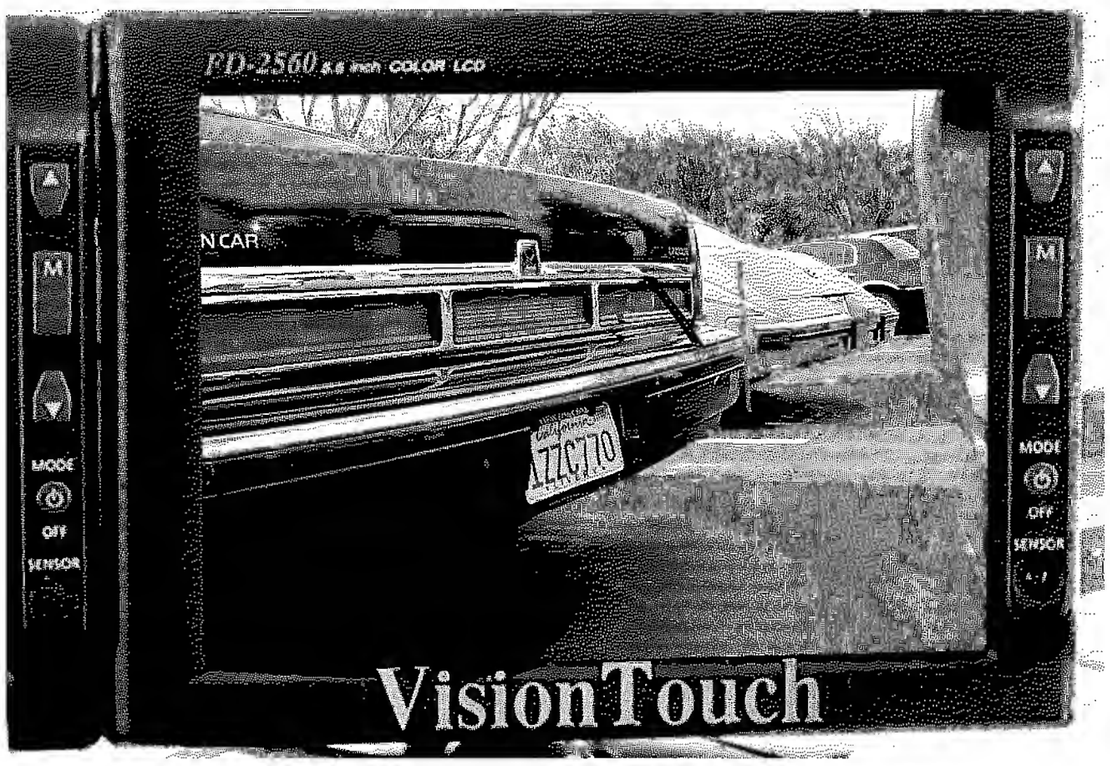


Figure **6A**

Rear side walk people
or bike detection

Figure **6B**

Approaching detection in the e-Mirror



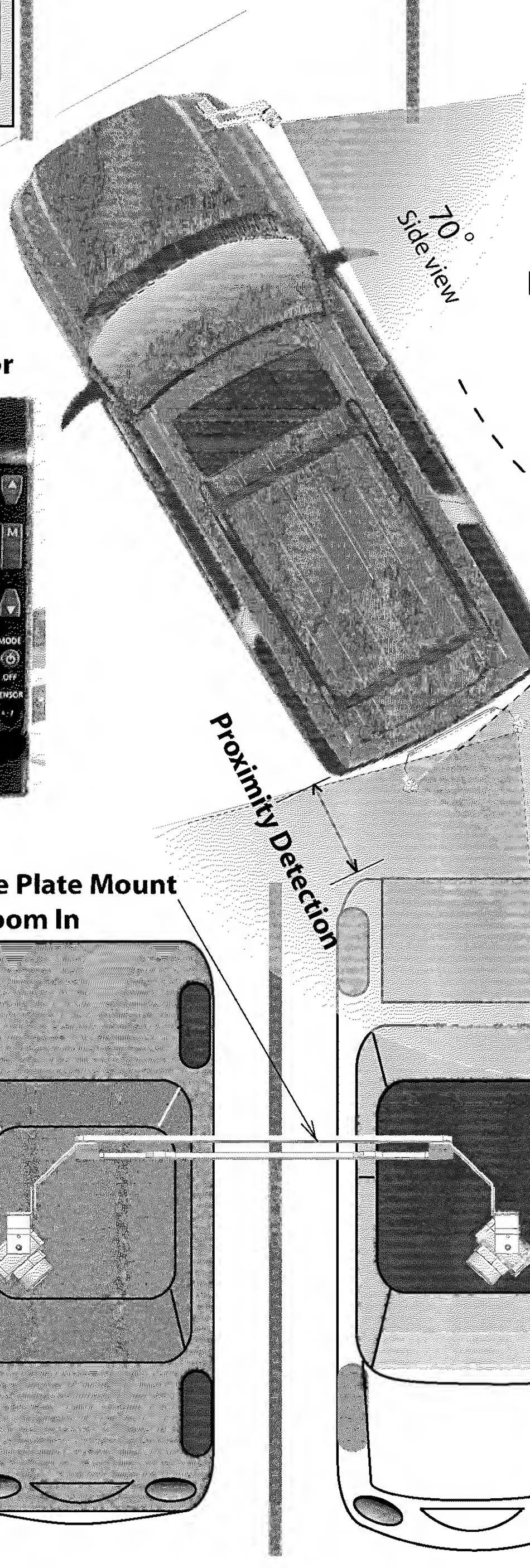
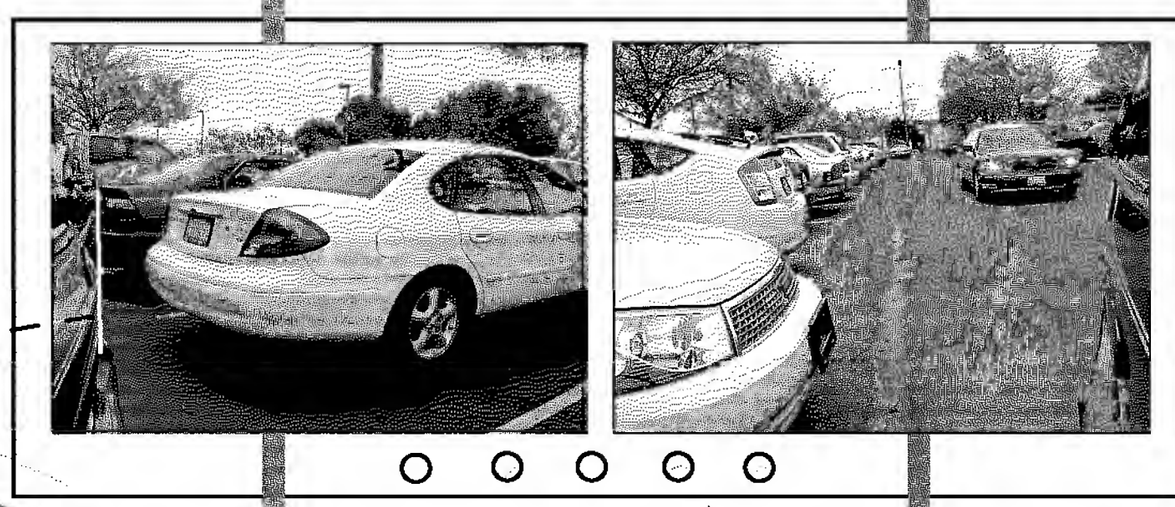


Figure **6C**

7. Better Proximity Detection Rear Corner Mount Technique
with Dual Cameras Corner Mount

Figure **7A** Proximity View at lower



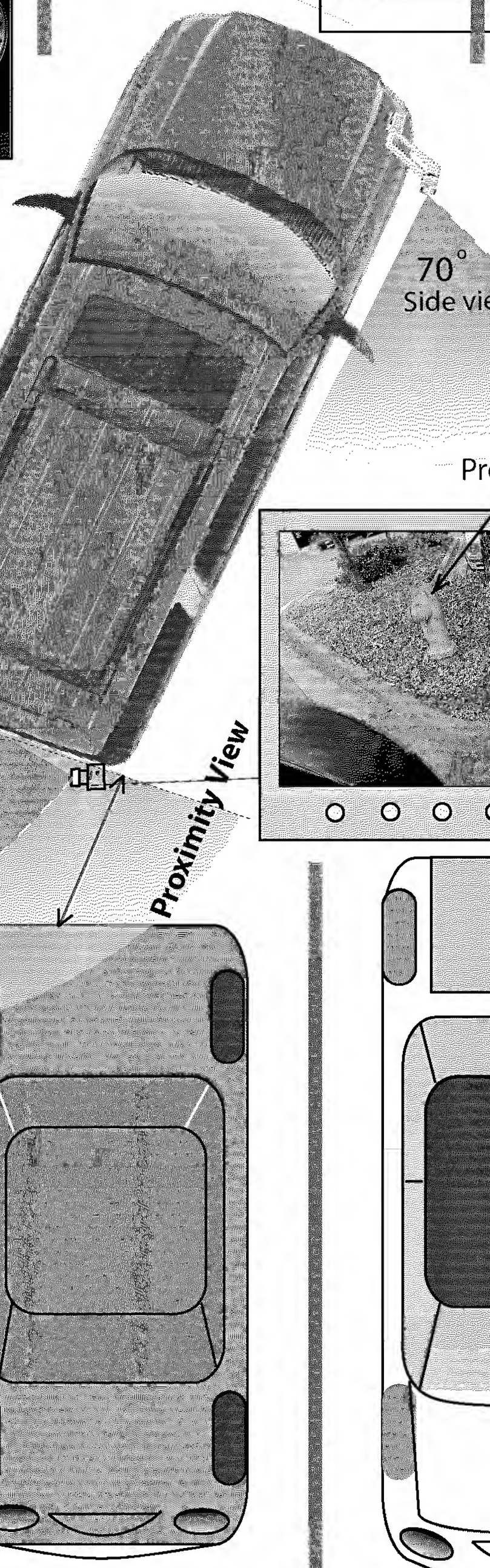


Figure **7C**

Proximity View on Upper

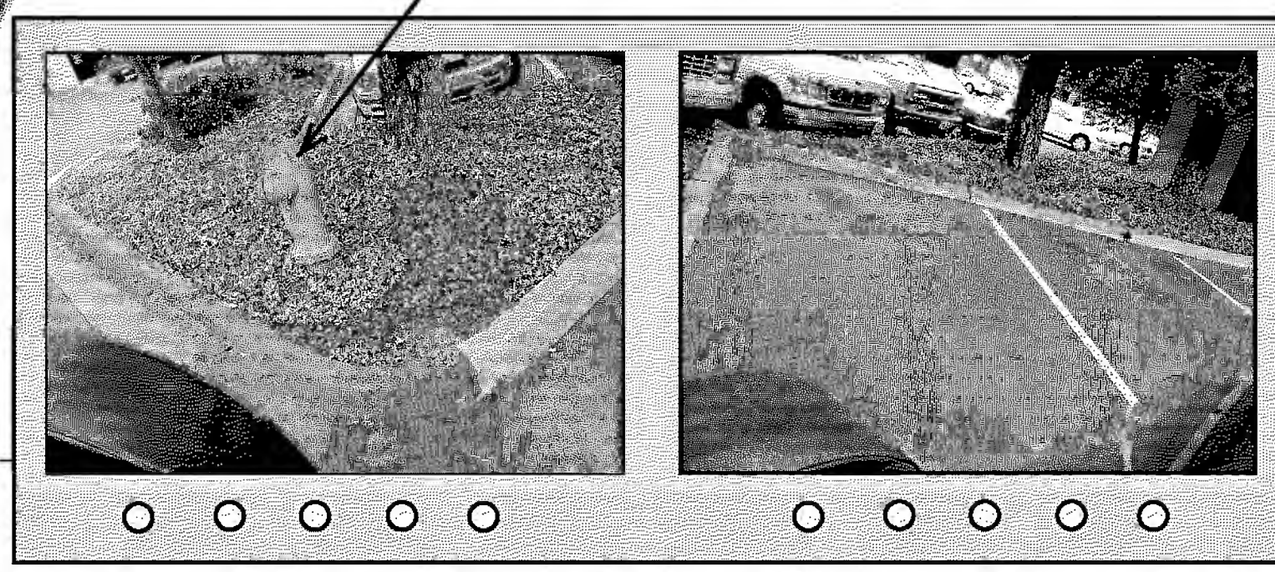
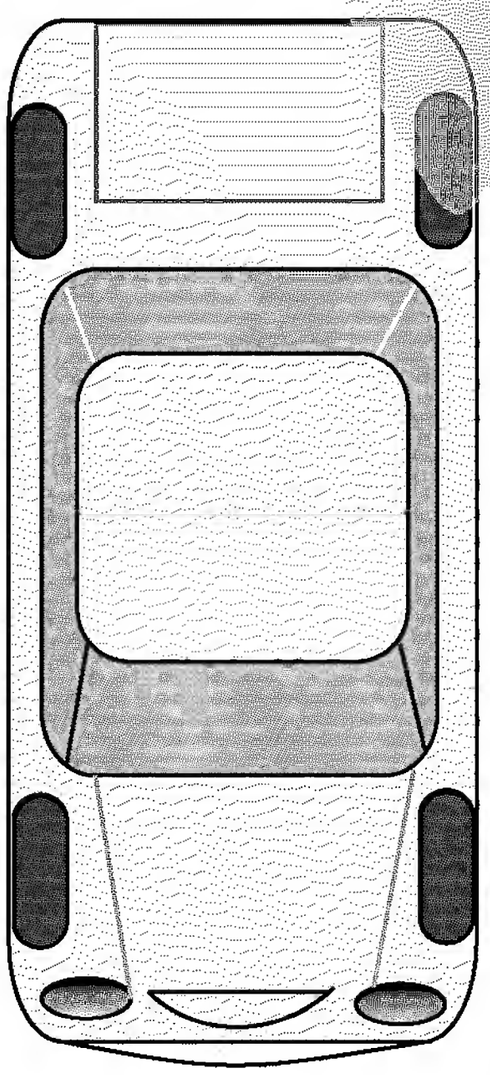
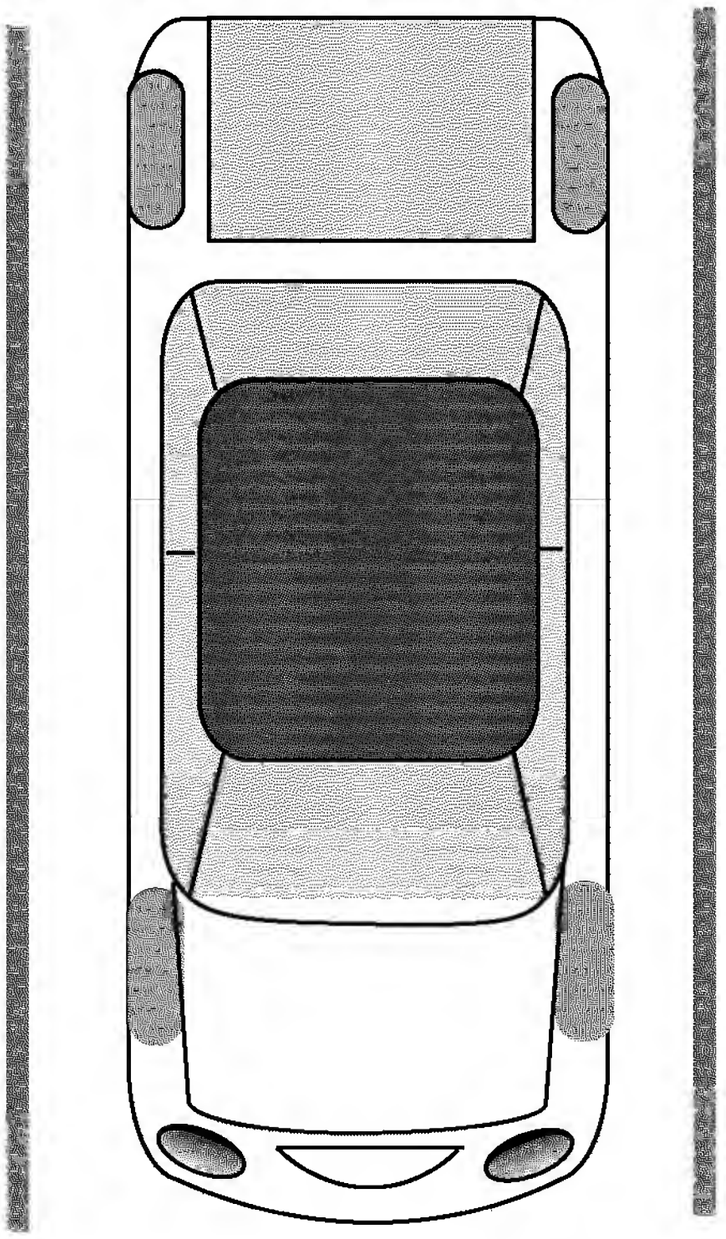


Figure **7B**

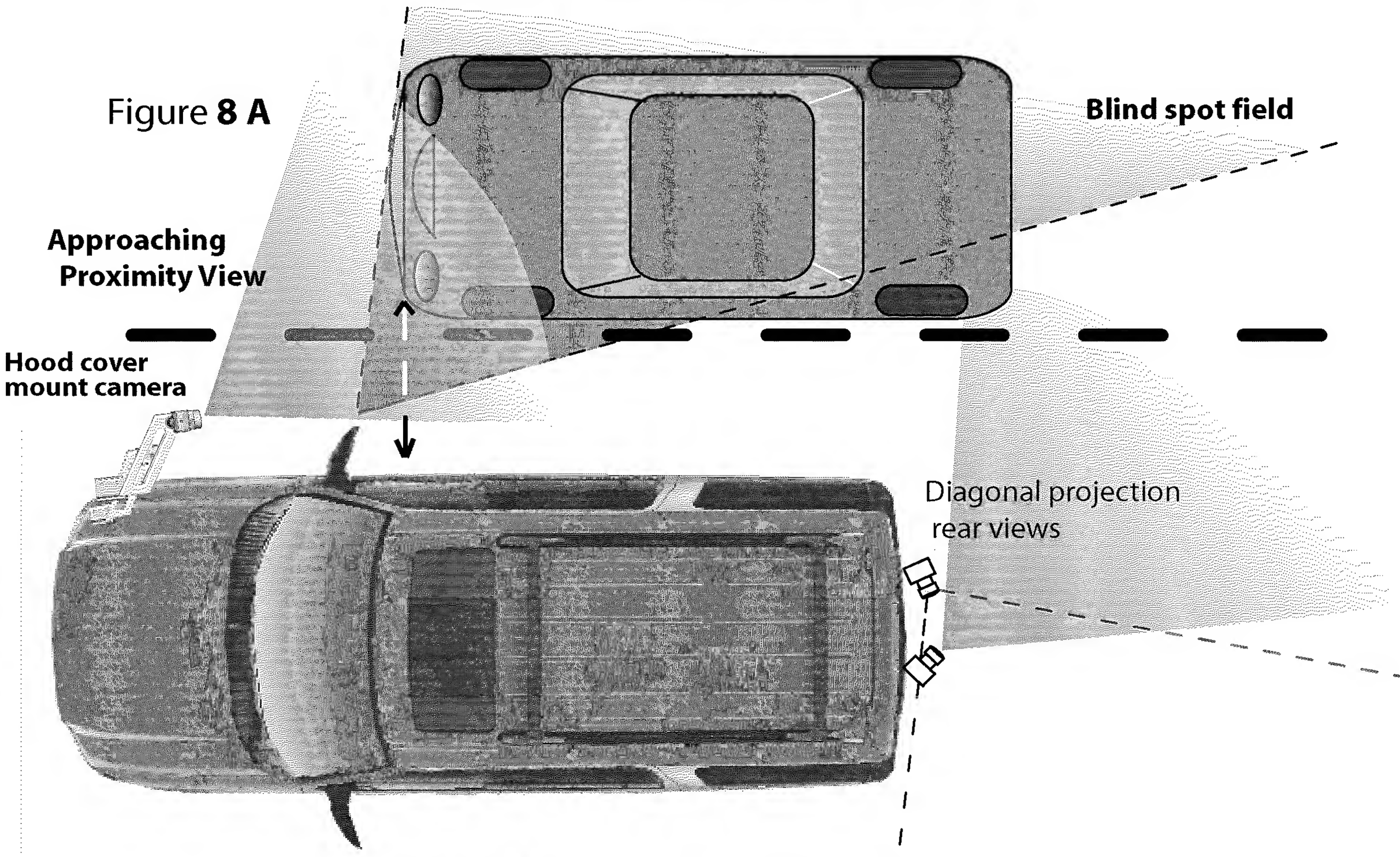




180° Rear view

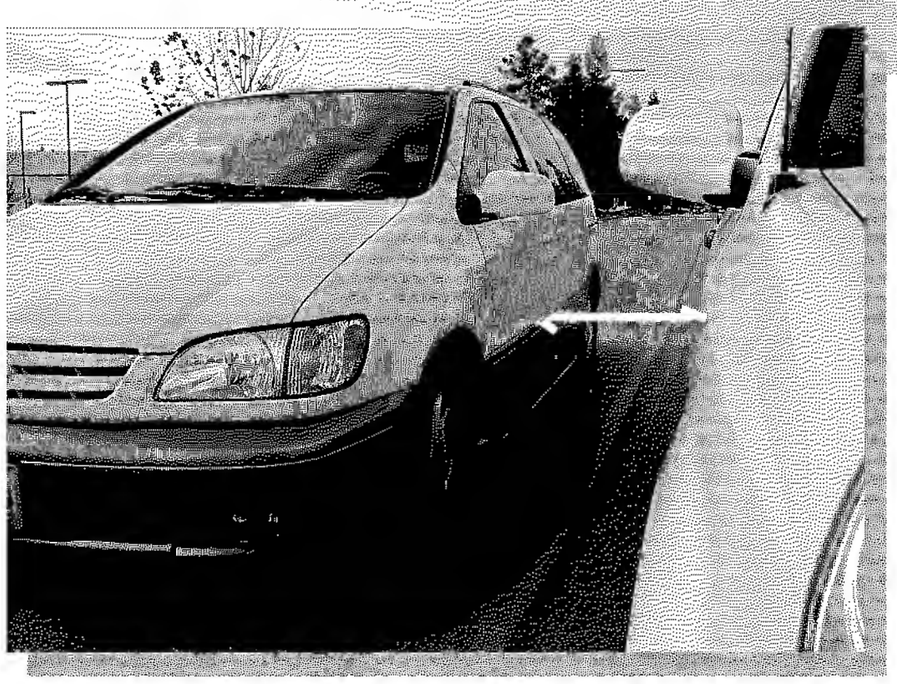
8. Object Approaching Detection At Blind Spot

Figure **8 A**



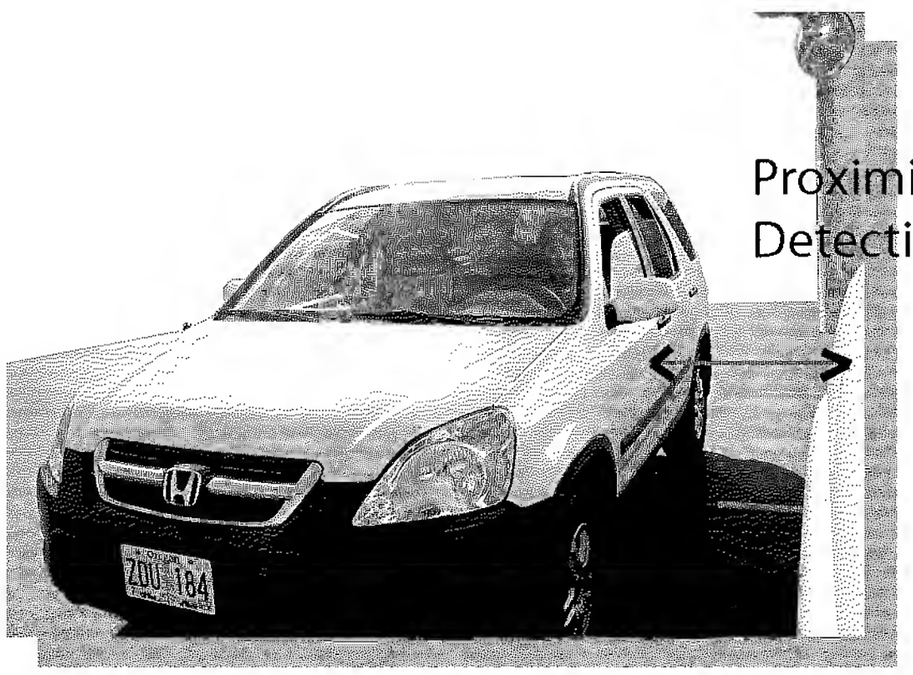
Object Approaching Detection

Figure 8 **B**



The blind spot view at passenger side

Figure **8 C**



Camera view on right blind spot of a truck

9. Hood Front Corner Side Edge Mount Technique

No visible drilling holes on shiny coating of vehicle

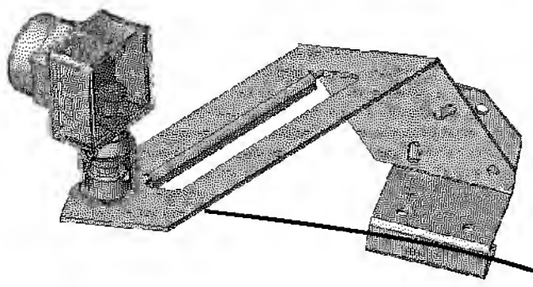
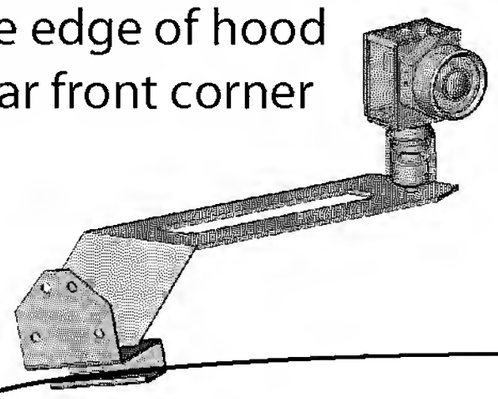


Figure **9B**

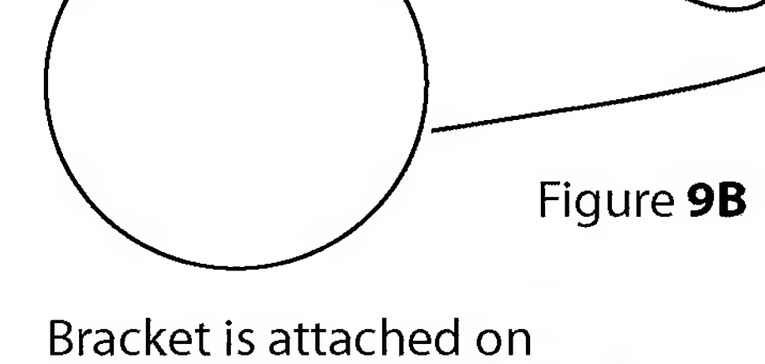
Bracket is attached on
side edge of hood
near front corner



The camera is mounted outside of
the vehicle a few inches away.

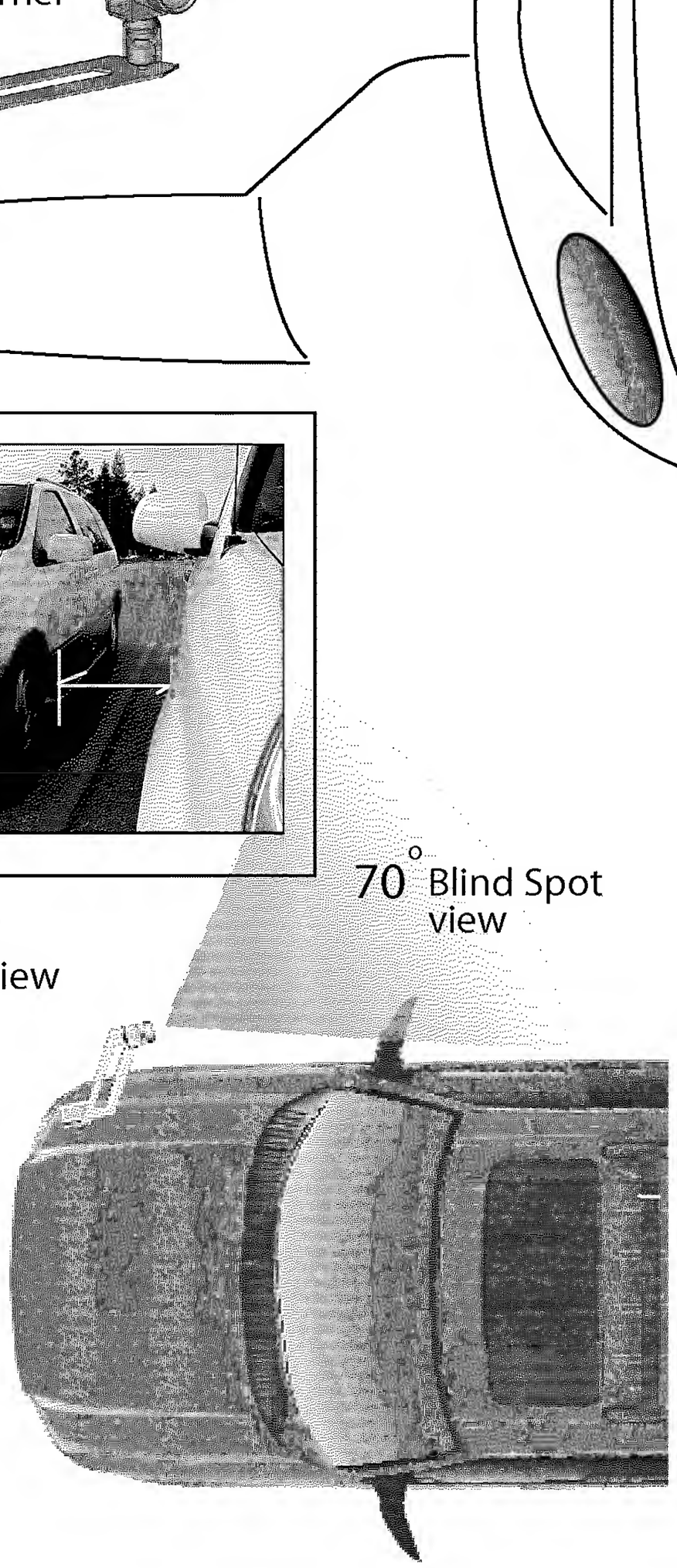
Figure **9A**

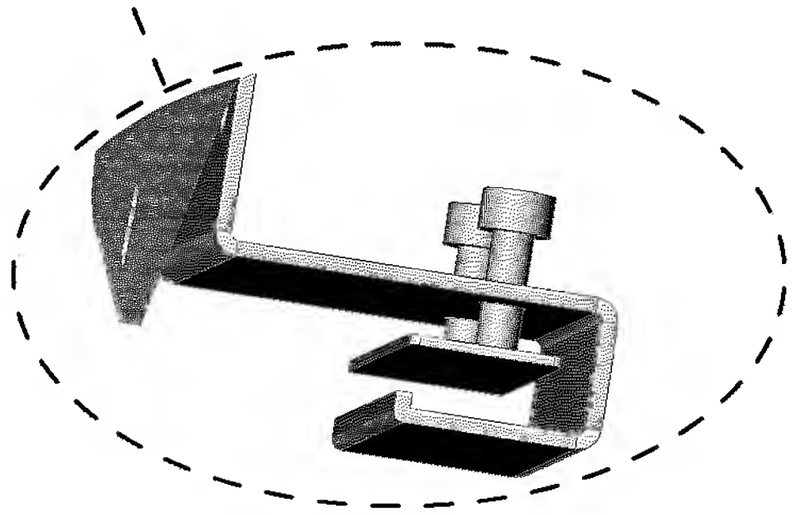
Bracket is attached on
side edge of hood
near front corner



Front Corner
Blind Spot View

70° Blind Spot
view

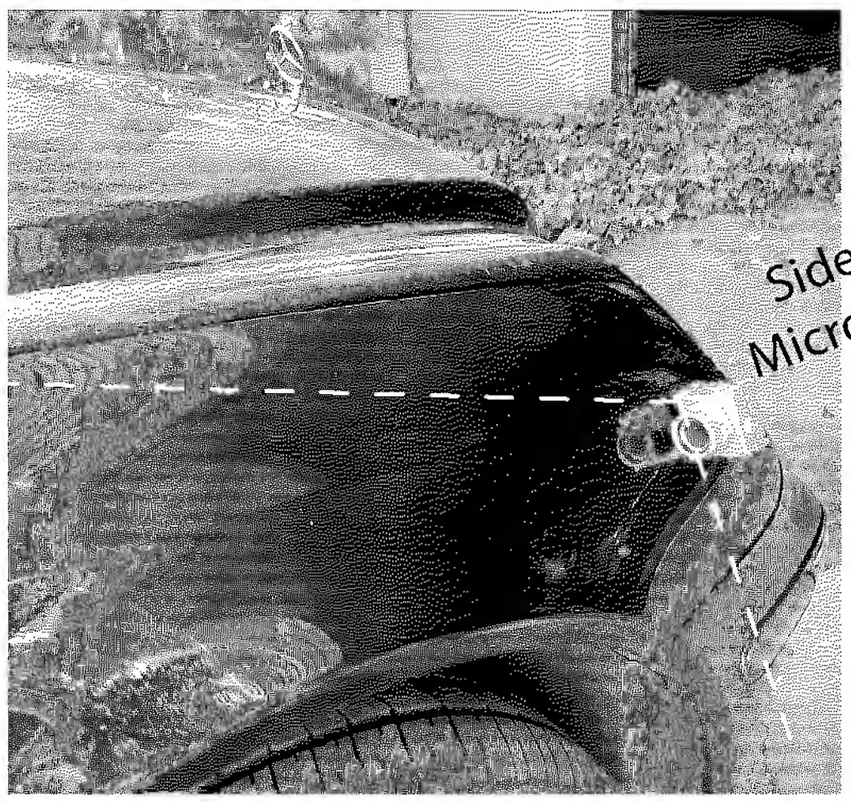




**No screw drilled
holes on visible surface**

Figure **9C**

An easy glue stick able mount



Side Views
Micro Cameras

10. Truck & Tow Truck e-Mirrors Setting

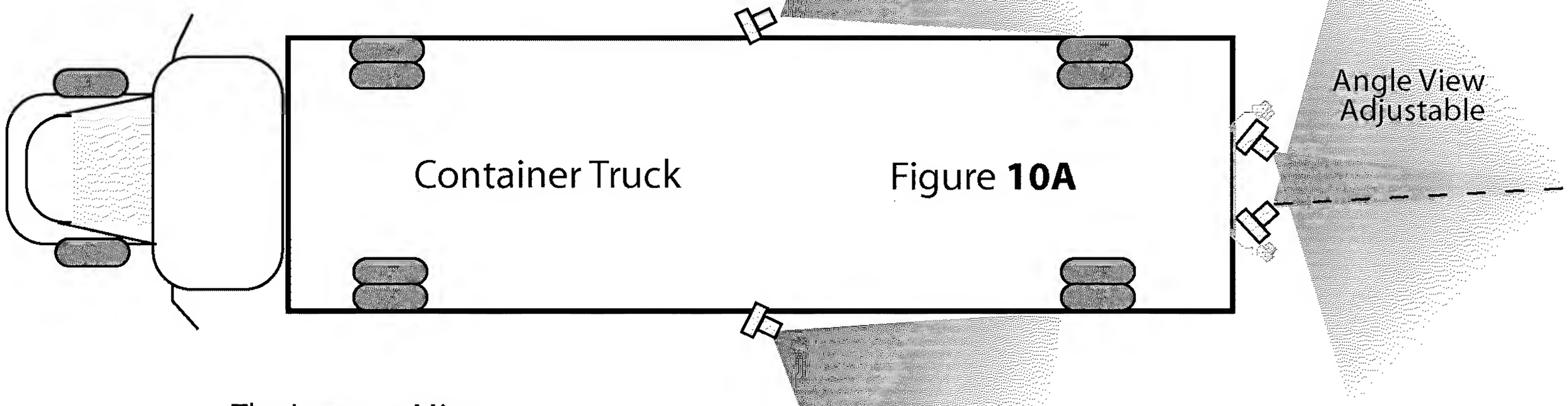


Figure **10A**

The Large e-Mirror
using quad split single LCD panel

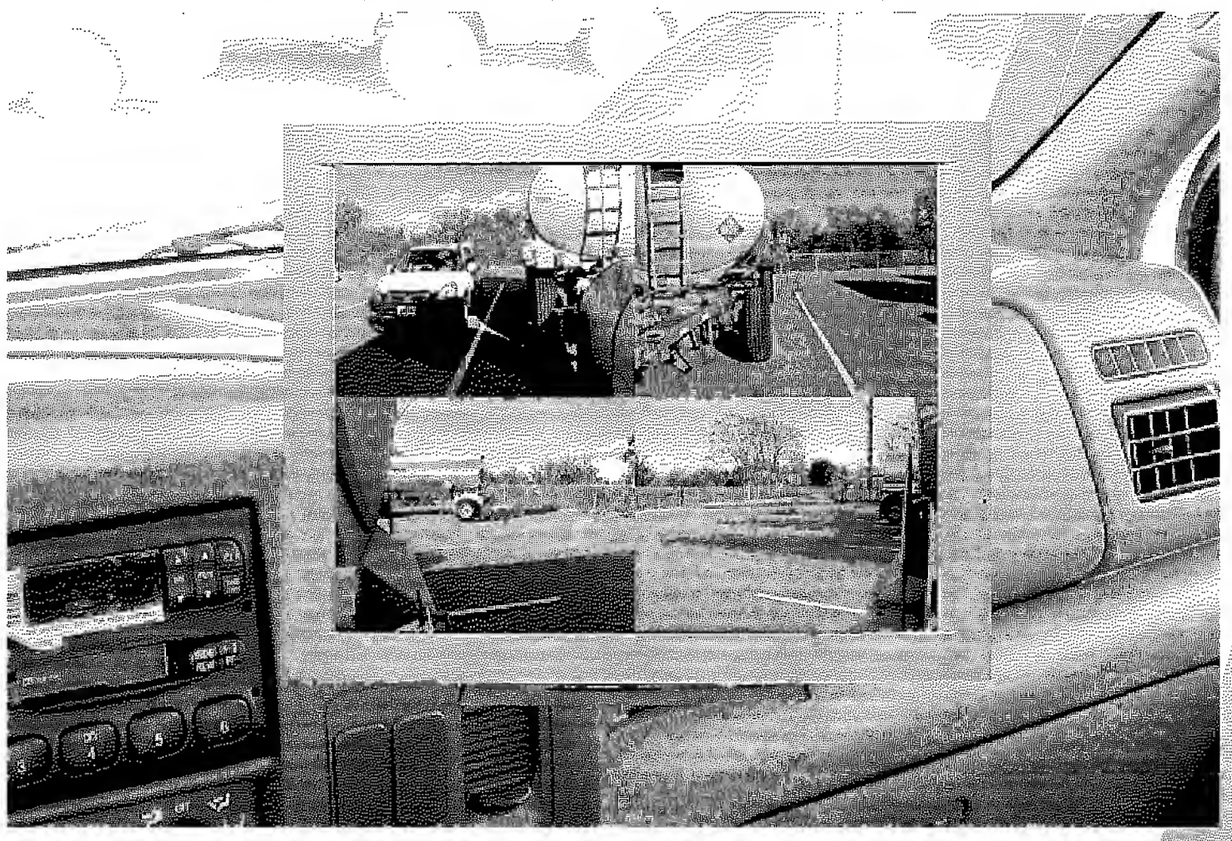


Figure **10B**

Large e-Mirrors using
4 LCD panels integration

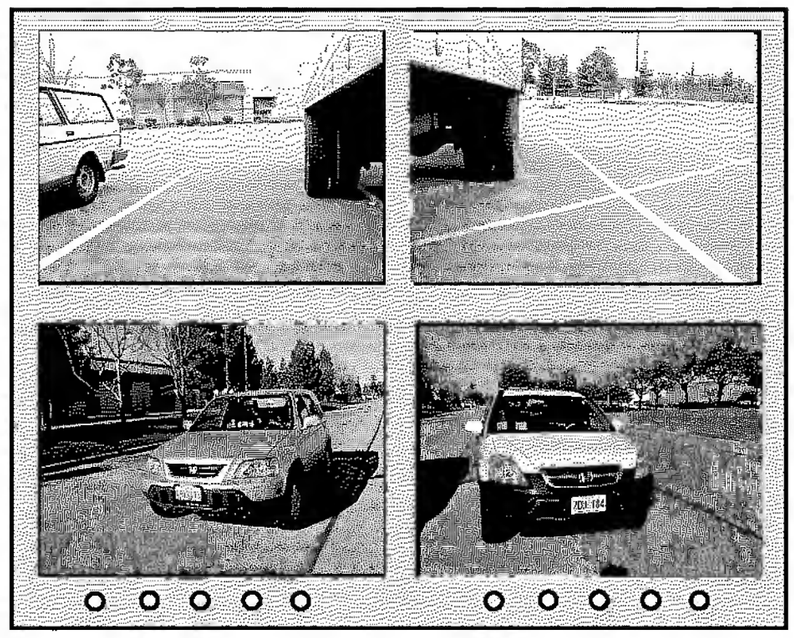


Figure **10E**

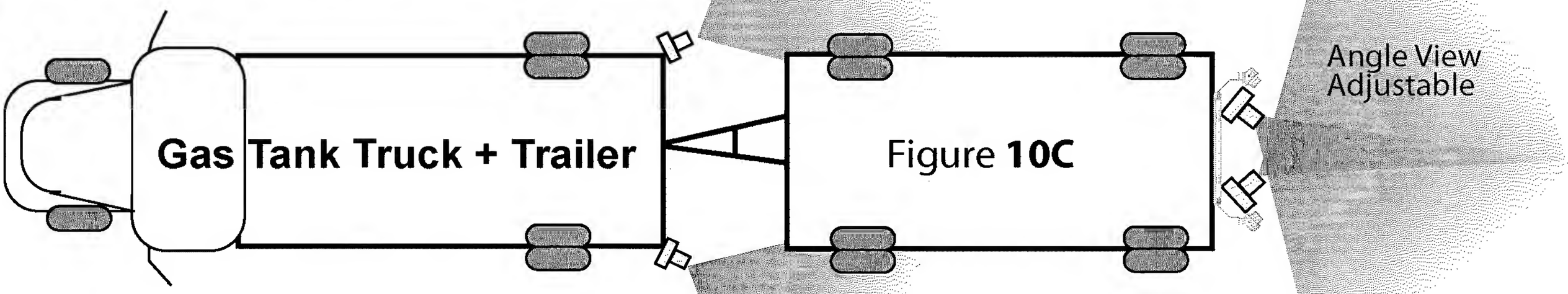


Figure **10C**

Tow Truck on Dash e-Mirrors

11. Panoramic High Safety Views for Mission Vehicles

Military Vehicles, Highway Patrol , Border Patrol,
Police Vehicles, Secret Service Vehicles, Fire truck
Armored Truck, Overman Vehicles, Sport & Racing Vehicles,

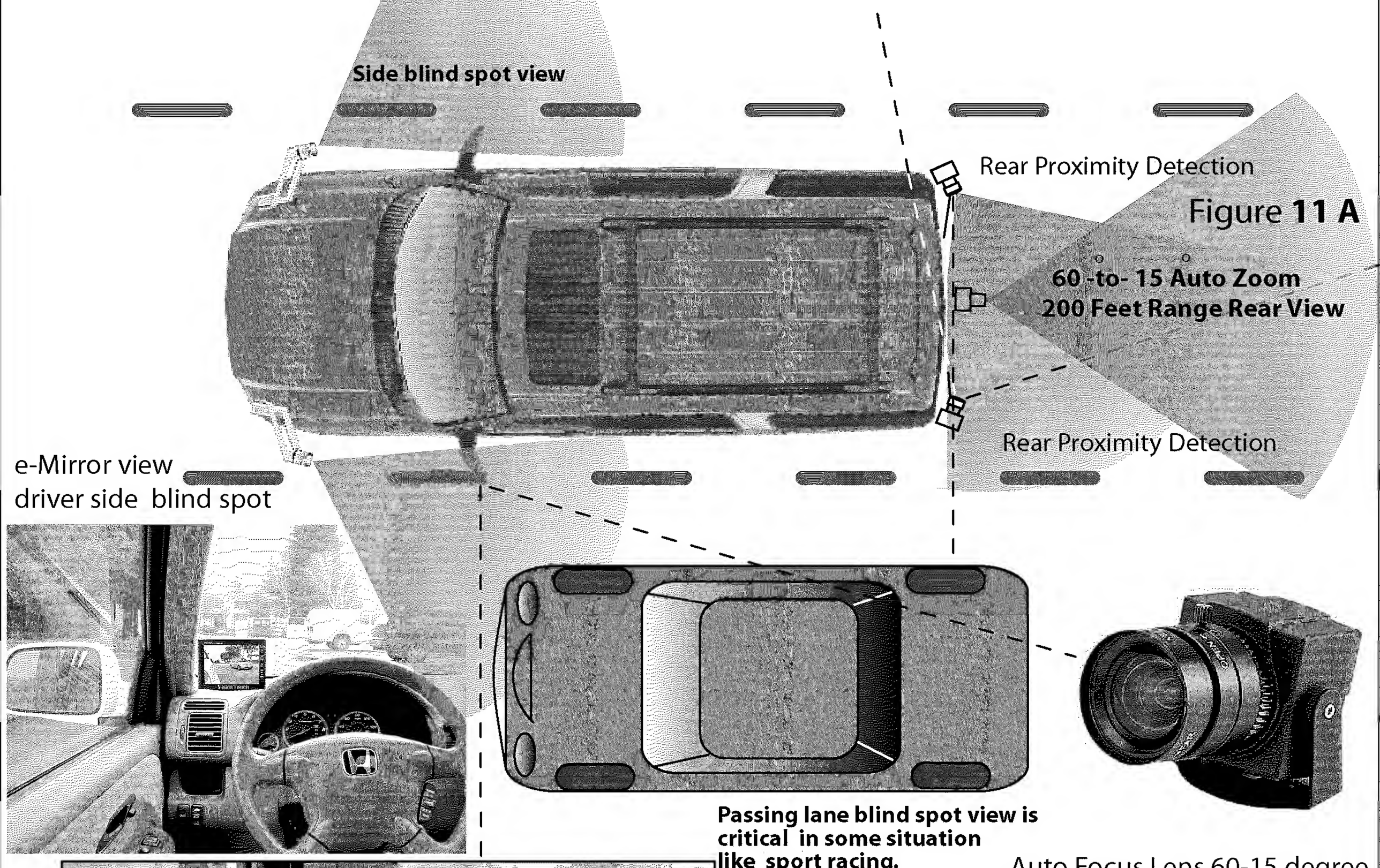


Figure **11 A**

Auto Focus Lens 60-15 degree
for central rear 200 feet view.

CS mount Len

Figure **11B**

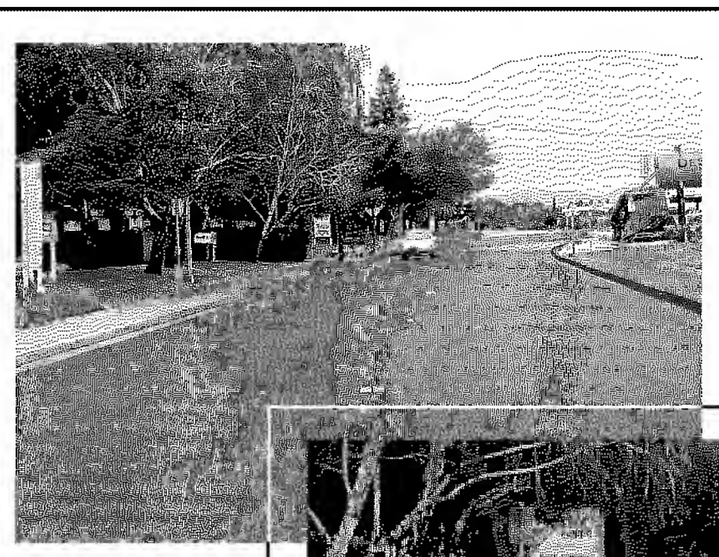
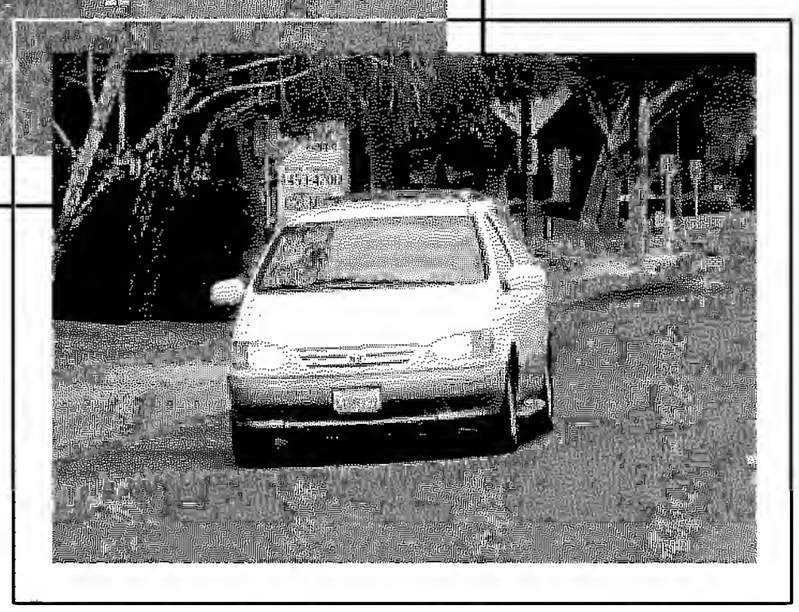


Figure **11 D**

Figure **11C**

Driver side
blind spot



Zoom In 200 feet View

12. Multi-Cameras, LCD e-Mirrors & Quad Video Processor Configurations

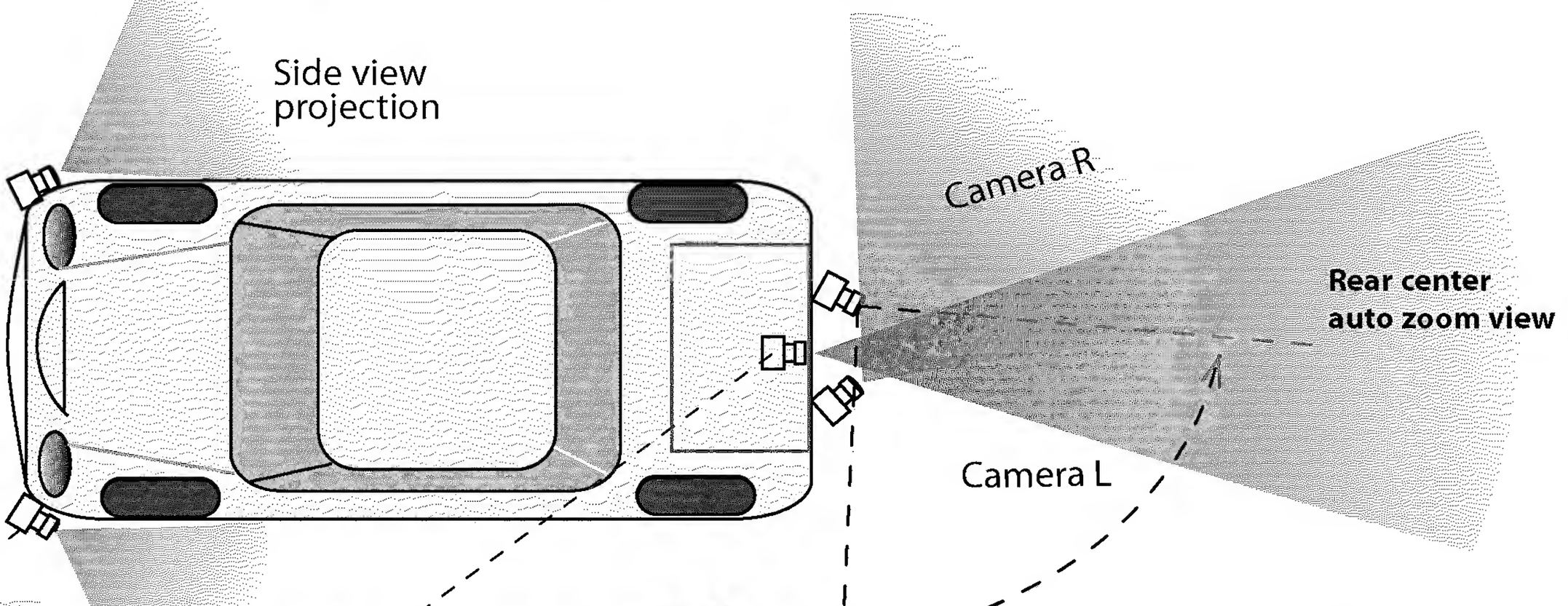


Figure **12 A**

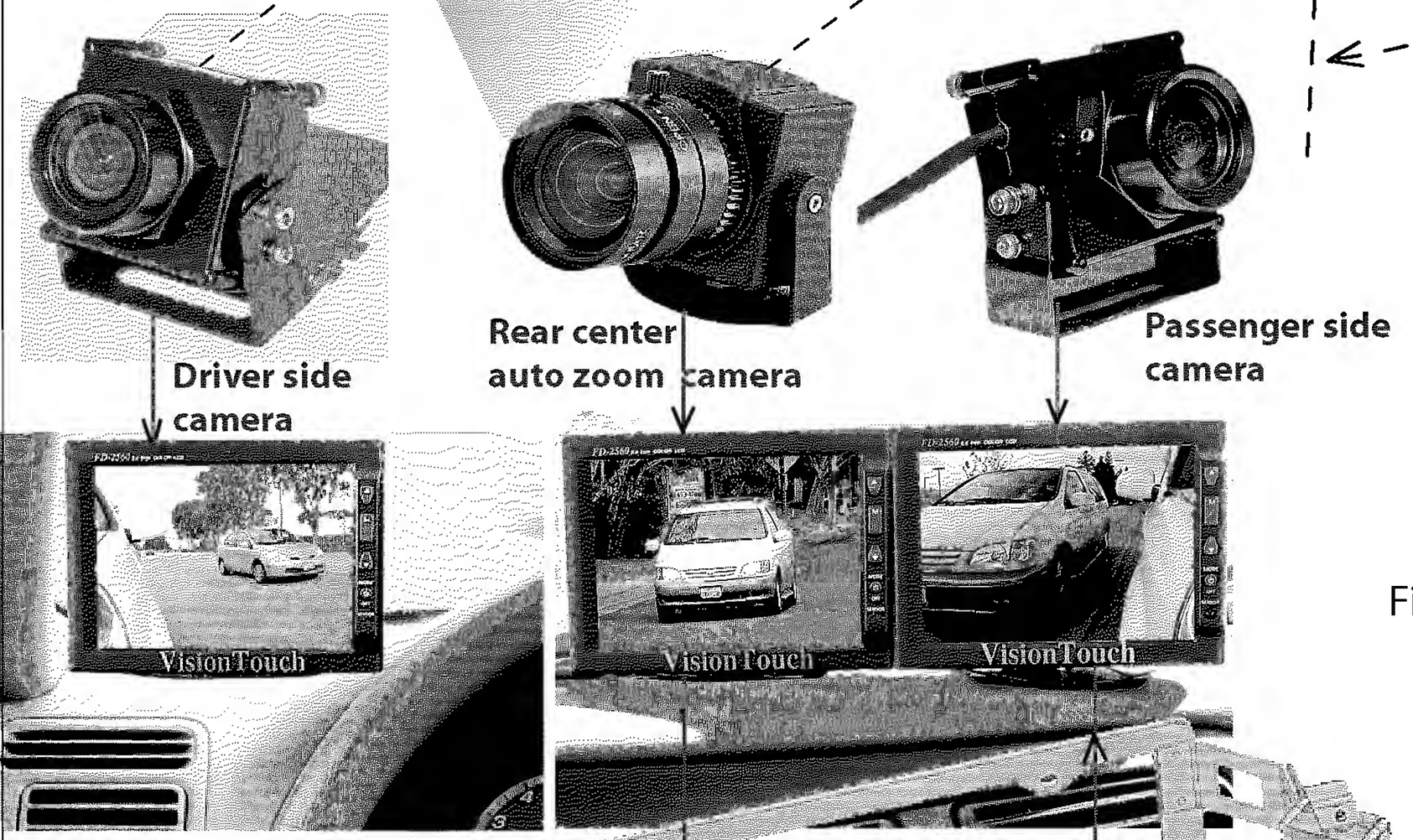


Figure **12 B**

Figure **12 C**

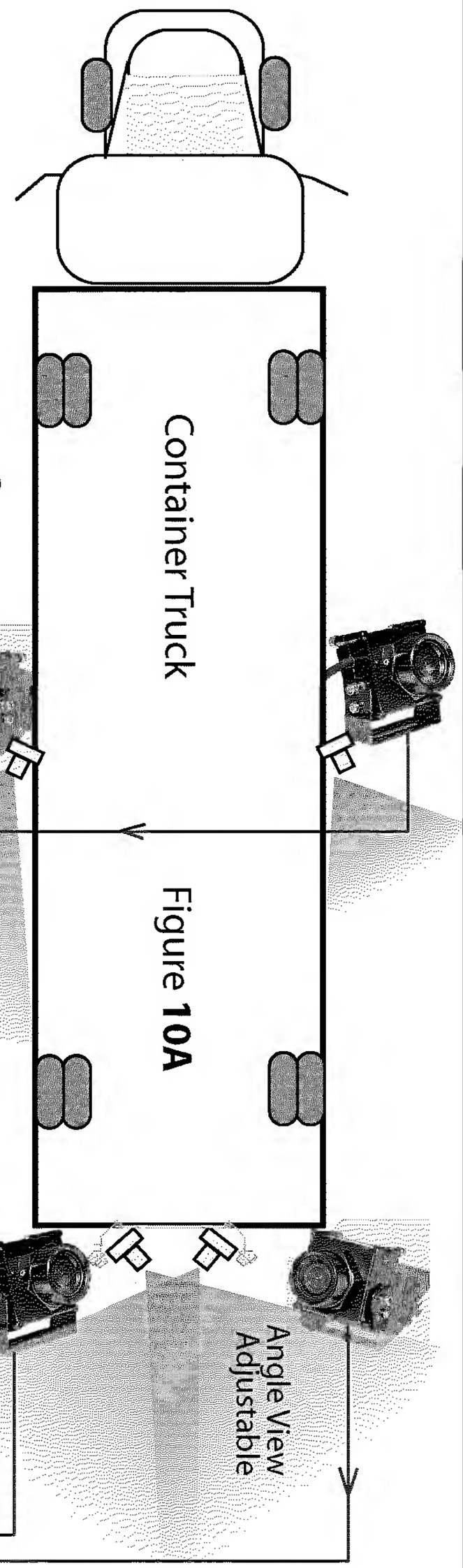


Figure **12 D**

Figure **10A**

For Large Vehicles

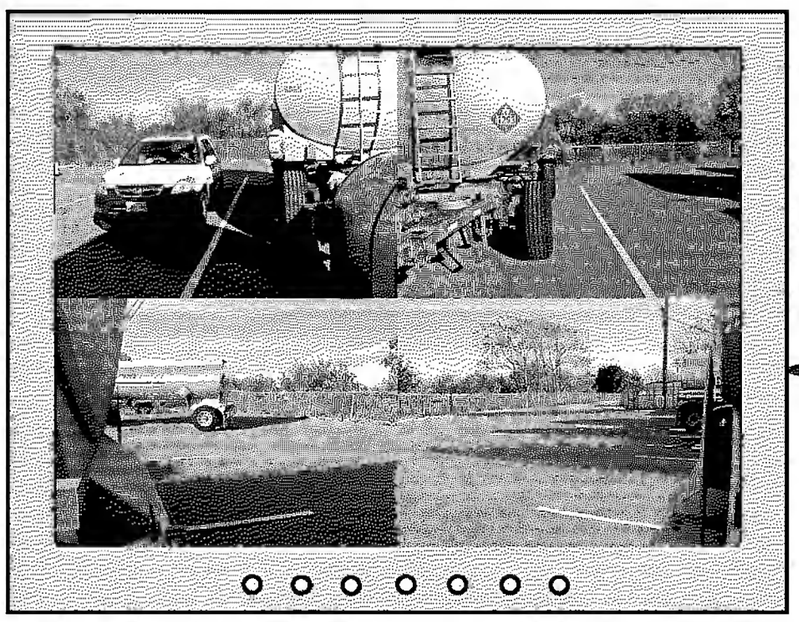


Figure **12 E**

Digital Quad Split Processor
Options : B/ W; Color